

# METHOD AND SYSTEM FOR DUAL LINK COMMUNICATIONS ENCRYPTION

## **Abstract Of The Disclosure**

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A method and systems are provided for creating an authentication of secure communications between a software video driver and a video display. A video driver transmitting digital video data deemed high-bandwidth digital content, to a display, performs authentication to determine if a secure connection has been established with a display. The video driver and the display both generate encryption keys that are compared to ensure that the display used is authorized for secure communications. A single stream of video data is encrypted using the secret keys. A first encryption key encrypts even-numbered pixels in the single stream of video data. A second encryption key encrypts odd-numbered pixels in the single stream of video data. The stream is split into two streams of data, which are transmitted to a display. The display decrypts each of the streams of encrypted video data and merges them to re-create the original stream of video data. At a regular interval, the video driver securely queries the status of the video controller to verify that the connection between video controller and video display is still authorized and secure.

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